

1 Deborah A. Sivas (CA Bar No. 135446)
Alicia E. Thesing (CA Bar No. 211751)
2 ENVIRONMENTAL LAW CLINIC
Mills Legal Clinic at Stanford Law School
3 559 Nathan Abbott Way
Stanford, California 94305-8610
4 Telephone: (650) 723-0325
Facsimile: (650) 723.4426
5 Email: dsivas@stanford.edu
Email: atthesing@stanford.edu
6

7 Attorneys for Plaintiffs (see Signature Page for
complete list).
8

9 UNITED STATES DISTRICT COURT
10 FOR THE NORTHERN DISTRICT OF CALIFORNIA
11 SAN FRANCISCO/OAKLAND DIVISION
12

13 PIT RIVER TRIBE; NATIVE COALITION
FOR MEDICINE LAKE HIGHLANDS
14 DEFENSE; MOUNT SHASTA
BIOREGIONAL ECOLOGY CENTER; and
15 MEDICINE LAKE CITIZENS FOR
QUALITY ENVIRONMENT,
16

17 Plaintiffs,

18 v.

19 BUREAU OF LAND MANAGEMENT;
UNITED STATES DEPARTMENT OF THE
INTERIOR; CALPINE CORPORATION; and
20 CPN TELEPHONE FLAT, INC.,
21

22 Defendants.
23
24
25
26
27
28

Case No.

**COMPLAINT FOR DECLARATORY
JUDGMENT AND INJUNCTIVE RELIEF**

Case No.

INTRODUCTION

1
2 1. This is an action for a declaratory judgment and injunctive relief in connection with
3 federal Geothermal Resources Lease identified as CA12372 (“Lease”), originally issued by the
4 Bureau of Land Management (“BLM”), and the BLM-managed Glass Mountain Unit, as created
5 by the Unit Agreement for the Development and Operation of the Glass Mountain Area (“Unit
6 Agreement”), on public land in northeastern California. The Lease is currently held by Calpine
7 Corporation or its wholly owned subsidiary CPN Telephone Flat, Inc. (collectively “Calpine”).
8 Pursuant to the Unit Agreement, as amended over time, Calpine is also the operator of the Glass
9 Mountain Unit and the sole owner of all federal geothermal leases remaining in the Unit.

10 2. Plaintiffs challenge the validity of the Lease on the grounds that BLM and the
11 United States Department of the Interior (collectively “Federal Defendants”) are engaged in an
12 ongoing failure to comply with their mandatory duty to terminate the Lease, as required by the
13 Geothermal Steam Act, 30 U.S.C. § 1001 et seq., its implementing regulations at 43 C.F.R. Part
14 3200 et seq., and the Lease itself, in response to Calpine’s continuing refusal to make diligent
15 efforts toward the utilization of geothermal resources.

16 3. Plaintiffs also challenge Federal Defendants’ ongoing failure to comply with their
17 mandatory duty to terminate the Unit Agreement or significantly contract the Unit to those leases
18 with a demonstrated capability to produce geothermal steam in commercial quantities, as required
19 by the Geothermal Steam Act, its implementing regulations, and the Unit Agreement, in response
20 to Calpine’s ongoing default under the Agreement, including its failure to pursue a continuous
21 program of exploratory drilling until actual production of geothermal resources.

22 4. Plaintiffs also challenge BLM’s ongoing arbitrary, capricious, and unlawful failure
23 to review the Unit Agreement at least every five years and eliminate those lands from the Unit that
24 are not demonstrated to be reasonably necessary for production of geothermal steam, as required
25 by the Geothermal Steam Act and its implementing regulations. BLM’s long-standing violation of
26 this clear statutory mandate has allowed Calpine and its predecessor(s) to continue holding more
27 than two dozen federal leases for over 25 years without conducting any meaningful exploration or
28

1 taking any meaningful steps toward development and utilization, at the expense of other multiple
2 use values on the leased public lands.

3 5. Plaintiffs seek an order: (1) declaring that Calpine is not in compliance with the
4 requirements of the Geothermal Steam Act, its implementing regulations, the Lease, and the Unit
5 Agreement; (2) declaring that Federal Defendants are violating the requirements of the
6 Geothermal Steam Act, its implementing regulations, and the Unit Agreement; (3) directing
7 Federal Defendants to terminate the Lease and Unit Agreement; and (4) enjoining Defendants
8 from further activity taken in reliance on the Lease or Unit Agreement.

9 **JURISDICTION AND VENUE**

10 6. The Court's jurisdiction over this action is conferred by 28 U.S.C. §§ 1331 (federal
11 question), 1346 (United States as defendant), 1362 (suits brought by Indian Tribes) and/or 2201-
12 2202 (declaratory and injunctive relief).

13 7. Venue is properly vested in this Court under 28 U.S.C. §§ 1391(b)(1), 1391(b)(2)
14 and/or 1391(e)(1) because all Defendants reside in California, Defendants Calpine Corporation
15 and CPN Telephone Flat, Inc. are residents of the Northern District of California, and a substantial
16 part of the events or omissions giving rise to the claims occurred in the Northern District of
17 California.

18 **INTRADISTRICT ASSIGNMENT**

19 8. Pursuant to Civil L.R. 3-5(b) and Civil L.R. 3-2(c)-(d), this action is properly
20 assigned to the San Francisco/Oakland Division because actions giving rise to Plaintiffs' claims
21 occurred in one or more of the counties covered by that Division.

22 **PARTIES**

23 9. Plaintiff PIT RIVER TRIBE (Ahjumawi-Atsuge Nation or "Tribe") is a federally
24 recognized sovereign Indian Tribe consisting of eleven autonomous bands. The Tribe is located in
25 parts of Shasta, Siskiyou, Modoc and Lassen Counties, and its ancestral territory includes
26 Medicine Lake and the surrounding Highlands. In 1987, the United States Department of the
27 Interior, acting through its Assistant Secretary, formally approved the Constitution adopted by the
28 Pit River Tribe, acknowledging the Tribe's ancestral lands, including Medicine Lake and the

1 surrounding Highlands, and the Tribe's relationship with these lands. The Tribe and its individual
2 members have a long history of using Medicine Lake and the Highlands for religious and cultural
3 purposes. For at least 10,000 years, members of the Pit River Tribe have used Medicine Lake and
4 the Highlands for religious activities such as vision quests, religious prayers and teaching,
5 traditional shaman/doctoring practices, life cycle ceremonies, collection of traditional foods,
6 medicines, and materials, spiritual renewal, and quiet contemplation. The Ahjumawi and
7 Atwamsini Bands of the Tribe continue to use the Medicine Lake Highlands area for these cultural
8 and religious purposes, and the area in its entirety is extremely significant to the cultural
9 continuity of these bands and to the Tribe as a whole. The Tribe and its individual members
10 derive spiritual, cultural, religious, health, environmental and aesthetic benefits from Medicine
11 Lake and the Highlands. These benefits depend on the physical, environmental, and visual
12 integrity of these areas, and their quietude. The exploration and development of geothermal leases
13 will interfere with these positive qualities of Medicine Lake and the Highlands. Thus, the interests
14 of the Pit River Tribe and its members have been, are being, and, unless the relief requested herein
15 is granted, will continue to be, injured by Defendants' failure to comply with applicable law in
16 connection with the Lease and Unit Agreement.

17 10. Plaintiff NATIVE COALITION FOR MEDICINE LAKE HIGHLANDS
18 DEFENSE ("Native Coalition") is a non-profit organization dedicated to the preservation of
19 cultural and environmental values in the Medicine Lake Highlands, which are sacred not only to
20 the Pit River Tribe but also to other Tribes of northeastern California and southeastern Oregon.
21 The Native Coalition includes among its members the California Council of Tribal Governments,
22 the Intertribal Council of California, and representatives from the Pit River, Modoc, Karuk, Shasta
23 and Wintu Tribes. Members of the Native Coalition use Medicine Lake and the Highlands for a
24 variety of spiritual and traditional cultural purposes, such as religious prayers, spiritual quests and
25 teaching, traditional shaman/doctoring practices, life cycle ceremonies, collection of traditional
26 foods, medicines, and material, quiet contemplation and general spiritual renewal. These purposes
27 depend on the physical, environmental, and visual integrity of these areas, and their quietude. The
28 exploration and development of geothermal leases will interfere with these positive qualities of

1 Medicine Lake and the Highlands. Thus, the interests of the Native Coalition and its members
2 have been, are being, and, unless the relief requested herein is granted, will continue to be injured
3 by Defendants' failure to comply with applicable law in connection with the Lease and Unit
4 Agreement.

5 11. Plaintiff MOUNT SHASTA BIOREGIONAL ECOLOGY CENTER ("Ecology
6 Center") is a non-profit public benefit corporation formed in 1988 and incorporated in 1991 for the
7 purpose of advancing public understanding of, and respect for, the environmental and cultural
8 resources of Mount Shasta and the surrounding area, including the Medicine Lake Highlands. The
9 Ecology Center works closely with Native American tribal representatives and advocates for
10 protection of the Native American traditional cultural values and resources that exist within the
11 Medicine Lake Highlands. The Ecology Center's members use and enjoy Medicine Lake and the
12 Medicine Lake Highlands for recreational activities, scientific research and spiritual fulfillment,
13 and derive spiritual, recreational, health, conservation, scientific and aesthetic benefits from the
14 preservation of the area in its natural state. These benefits depend on the physical, environmental,
15 and visual integrity of these areas, and their quietude. The exploration and development of
16 geothermal leases will interfere with these positive qualities of Medicine Lake and the Highlands.
17 Thus, the interests of the Ecology Center and its members have been, are being, and, unless the
18 relief requested herein is granted, will continue to be injured by Defendants' failure to comply
19 with applicable law in connection with the Lease and Unit Agreement.

20 12. Plaintiff MEDICINE LAKE CITIZENS FOR QUALITY ENVIRONMENT
21 ("Medicine Lake Citizens") is a nonprofit public benefit corporation formed in 1998 for the
22 purpose of educating the public about the unique environmental and spiritual resources of
23 Medicine Lake and its surrounding forests, mountain peaks, scenic vistas, unusual volcanic
24 structures and plentiful wildlife. The members of Medicine Lake Citizens use and enjoy Medicine
25 Lake and the Highlands for hiking, photography, bird observation, fishing, hunting, nature study,
26 aesthetic enjoyment and the collection of forest products for arts and crafts. These benefits depend
27 on the physical, environmental, and visual integrity of these areas, and their quietude. The
28 exploration and development of geothermal leases will interfere with these positive qualities of

1 Medicine Lake and the Highlands. Thus, the interests of Medicine Lake Citizens and its members
2 have been, are being, and, unless the relief requested herein is granted, will continue to be injured
3 by Defendants' failure to comply with applicable law in connection with the Lease and Unit
4 Agreement.

5 13. Plaintiffs collectively have an interest in the orderly and lawful administration of
6 geothermal resources in the Medicine Lake Highlands area, including the timely review and
7 termination of leases and other agreements relating to lands that cannot be or are not being used to
8 produce geothermal steam. The unlawful continuation of such leases and other agreements with
9 private parties prevents Plaintiffs from fully accessing the public lands at issue in this case and
10 from pursuing their interest in long-term protection and sustainable management of these lands
11 and their natural resources.

12 14. Defendant BUREAU OF LAND MANAGEMENT ("BLM") is an agency within
13 the United States Department of the Interior charged with managing certain lands and natural
14 resources owned by the federal government, including subsurface geothermal resources within the
15 Glass Mountain Unit. BLM issued the Lease and Unit Agreement at issue in this case. BLM's
16 decisions and communications regarding the Lease, Glass Mountain Unit, and Unit Agreement
17 originated from BLM's California State Office.

18 15. Defendant UNITED STATES DEPARTMENT OF THE INTERIOR is ultimately
19 responsible for ensuring that the federal geothermal resources at issue in this lawsuit are managed
20 in accordance with applicable law and for ensuring that BLM complies with its duties under law.
21 The Office of Environmental Policy and Compliance within the Department of the Interior, by its
22 own description, "serves as a leader in conservation stewardship and the sustainable development
23 and use of Department-managed resources for the benefit of the public." Its stated mission is to
24 "form and foster partnerships to enhance resource use and protection, as well as to expand public
25 access to safe and clean lands under the Department's jurisdiction." To carry out that mission, the
26 Office of Environmental Policy and Compliance, among other things, "provides for a coordinated
27 and unified approach and response to environmental issues that affect multiple bureaus" and
28 "provides guidance for the Department's compliance with the full range of existing environmental

1 statutes, executive orders, regulations and other requirements.” The Department’s regional Office
2 of Environmental Policy and Compliance for the region covering California, Nevada, and Arizona
3 is located in San Francisco, California and its failure to ensure BLM compliance with applicable
4 law, accordingly, occurred there.

5 16. Defendant CALPINE CORPORATION is a for-profit corporation with regional
6 headquarters in Dublin, California that oversees the corporation’s renewable energy development
7 in California. According to Calpine Corporation’s website, Calpine owns and operates twenty-
8 four power plants and maintains five corporate offices in the Northern District of California,
9 including in Dublin, Alameda County, California. Calpine Corporation’s founding office in San
10 Jose, California served as its corporate headquarters until 2009 during much of the period covered
11 by Plaintiffs’ claims in this case. All recent communications from Federal Defendants in regard to
12 the Lease and Unit Agreement have been directed to Calpine Corporation in Middletown,
13 California.

14 17. Defendant CPN TELEPHONE FLAT, INC. is a wholly owned subsidiary of
15 Calpine Corporation currently operating from Middletown, California, and is an entity with whom
16 BLM also regularly corresponds regarding compliance with the Lease and Unit Agreement.

17 18. Calpine Corporation or CPN Telephone Flat, Inc. (collectively hereinafter
18 “Calpine”) holds the geothermal Lease at issue in this case, as well as the other leases comprising
19 the Glass Mountain Unit, and serves as the operator of that Unit. To the best of Plaintiffs
20 knowledge, no other individual or company holds federal geothermal leases within the Glass
21 Mountain Unit. Despite Calpine’s total control of the Unit, Calpine has failed to conduct diligent
22 efforts toward the utilization of geothermal steam on the Lease and in the Glass Mountain Unit as
23 required under the Geothermal Steam Act, the Lease, and the Unit Agreement. Calpine is properly
24 named as a defendant in this action because, in its absence, complete relief cannot be afforded to
25 Plaintiffs. National Wildlife Federation v. Epsy, 45 F.3d 1337, 1344 (9th Cir. 1995).

26 ///

27 ///

28 ///

BACKGROUND

A. The Medicine Lake Highlands

19. Medicine Lake and its surrounding Highlands provide a diversity of landscapes, including freshwater springs, lava flows, volcanic peaks, fertile marshes and grasslands, and dense forests across three contiguous National Forests – the Modoc, Klamath, and Shasta-Trinity. The area’s mixed conifer forests – interspersed with lava fields, cinder cones, and obsidian rock – support 400 species of wildlife, including bald eagles and northern spotted owls. The Highlands also support a designated old-growth reserve and the 10,800-acre Mount Hoffman Roadless Area on the Modoc National Forest.

20. These unique features have made the Highlands a place of sacred power and cultural significance to Native Americans for over 10,000 years. The sacredness and significance of the area is tied not only to specific geologic features or particular environmental resources, but also to the physical, environmental, and spiritual integrity of the landscape as a whole.

21. As the ancestral home and spiritual heart of the Pit River people, Medicine Lake is where tribal members return for reconnection and renewal. Many of the tribe’s traditions are interwoven with the land. New fathers run to the mountains to dance and swim following the birth of a child. Young girls join ceremonies held in sacred mountain sites to mark their transition into adolescence, while boys journey through the mountains in search of guardian spirits who will bestow them with good fortune in adulthood. Shamans embark on dream quests in the mountains in search of *tamakumi* – a powerful spirit who will enable them to heal illnesses. Rooted in the earth and waters of the Highlands, these cultural practices tie generations of tribal members together.

22. Recognizing the natural and spiritual significance of the Highlands, the Keeper of the National Register of Historic Places has determined that the Medicine Lake Caldera is eligible for listing on the Register as a Traditional Cultural Places District. This determination provides the Medicine Lake Caldera with the same level of protection as an actual listing.

23. The Lease and Unit lands lie within and adjacent to the designated District.

B. Applicable Leasing Provisions of the Geothermal Steam Act, Its Implementing Regulations, and the Lease

24. The Geothermal Steam Act (or “Act”), originally enacted in 1970, authorized the Secretary of the Interior to issue ten-year leases for the exploration, development, and production of geothermal steam from federal lands.

25. A geothermal lease issued under the Act expires and terminates automatically at the end of its ten-year primary term unless it is lawfully extended or continued consistent with the Act.

26. When the Lease was issued in 1982, the Act provided that “[i]f geothermal steam is produced or utilized in commercial quantities within this term, such lease shall continue for so long thereafter as geothermal steam is produced or utilized in commercial quantities, but such continuation shall not exceed an additional forty years.”

27. The Geothermal Steam Act defines the phrase “produced or utilized in commercial quantities” to include not only actual production or utilization, but also “the completion of a well capable of producing geothermal steam in commercial quantities so long as the Secretary determines that diligent efforts are being made toward the utilization of the geothermal steam.”

28. Thus, the Act provides that where a lessee has completed a well deemed by BLM to be capable of producing geothermal steam in commercial quantities, that lease may continue beyond its primary term, but only for so long as diligent efforts are being made toward the commercial utilization of the geothermal resource.

29. The Geothermal Steam Act implementing regulations elaborate on these statutory lease continuation provisions. While prior versions of the regulations described a lease continuation as an “additional term,” the current regulations refer to such a lease continuation as a “production extension.” 43 C.F.R. § 3207.15 (hereinafter “production extension regulations”).

30. The production extension regulations provide that, in order to grant a production extension for a geothermal lease, BLM must first determine that the lease either (1) has a well that is actually producing geothermal resources in commercial quantities or (2) has completed a well

1 that is capable of producing geothermal resources in commercial quantities and the lessee is
2 “making diligent efforts toward utilization of the resource.”

3 31. To qualify for a production extension based only on a capable well (i.e., where no
4 actual production is occurring) under the production extension regulations, the lessee must
5 “demonstrate on an annual basis” that the lessee is “making diligent efforts toward utilization of
6 the resource.”

7 32. For BLM to make a determination that a lessee is making diligent efforts toward
8 utilization of the resource sufficient to qualify for a production extension, the lessee must provide,
9 and BLM must consider, information showing the lessee’s diligent actions and other relevant
10 conditions, such as actions the lessee has taken to identify and define the geothermal resource on
11 the leasehold or to negotiate marketing arrangements, sales contracts, and drilling agreements.

12 33. Under the production extensions regulations, production extensions may continue
13 for up to 35 years “as long as the geothermal resource is being produced or utilized in commercial
14 quantities.” The term “commercial quantities” is defined by the regulations to mean (i) for an
15 individual lease, a sufficient volume (in terms of flow and temperature) of the resource to provide
16 a reasonable return after the lessee meets all costs of production or (ii) for a unit, a sufficient
17 volume (in terms of flow and temperature) of the resource to provide a reasonable return after the
18 operator meets all costs of drilling and production.

19 34. Thus, the production extension regulations provide that, in order to maintain a lease
20 that has been continued under a production extension where no actual production or utilization has
21 occurred, BLM must determine on an annual basis that the lessee is engaged in diligent efforts
22 toward utilization of the resource at a volume of flow and temperature that provides a reasonable
23 return after all costs of production.

24 35. If the lessee fails to satisfy the diligent efforts requirements, the production
25 extension regulations mandate that BLM terminate the lease.

26 36. Effective June 1, 1982, BLM issued the Lease, identified as “CA12372,” for the
27 exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of geothermal
28

resources on 2,560 acres of federal land within the National Forest in Siskiyou County, California, as further described in the Lease.

37. Consistent with the Geothermal Steam Act and its implementing regulations, the Lease states: “This lease shall be for a primary term of ten (10) years from the effective date and so long thereafter as geothermal steam is produced and utilized in commercial quantities.”

38. The Lease also requires the drilling and production of wells “so that the leased lands may be properly and timely developed for the production of geothermal steam.”

C. Applicable Unit Agreement Provisions of the Geothermal Steam Act, Its Implementing Regulations, and the Unit Agreement

39. Section 1017 of the Geothermal Steam Act authorizes the Secretary of the Interior to approve a “unit agreement” for the purpose of conserving natural resources in a single geothermal reservoir or field if the Secretary determines and certifies that such unit agreement is necessary or advisable to protect the public interest.

40. A “unit agreement” is defined as a “cooperative plan of development or operation” that allows multiple leaseholders to unite in exploring and developing a single geothermal reservoir or field.

41. In connection with the creation and operation of any unit agreement, the Secretary may impose conditions with respect to the leases covered by the unit agreement as he or she deems necessary or advisable to secure the protection of the public interest.

42. Section 1017 of the Geothermal Steam Act mandates that the Secretary “shall” review each unit agreement at least every five years and eliminate from inclusion in the unit any land that is not reasonably necessary for operation of the unit.

43. The Geothermal Steam Act implementing regulations elaborate on the formation, operation, and termination of unit agreements. 43 C.F.R. Part 3280 (hereinafter “unit agreement regulations”).

44. A “unit agreement” is defined under the regulations as an agreement for the exploration, development, production, and utilization of “separately owned interests” in a geothermal reservoir, field, or like area which provides for the allocation of costs and benefits on a

1 basis defined in the agreement or plan. Thus, a unit agreement is intended to efficiently allocate
2 risk and reward to separately-owned leases that are exploring and developing a common pool
3 geothermal resource.

4 45. The unit agreement regulations require that, before BLM designates a unit area, the
5 prospective unit operator must submit and BLM must consider the documents listed in 43 C.F.R. §
6 3281.2, including but not limited to a report detailing the geologic information indicating that the
7 area is appropriate for unitization. BLM must then determine whether the area is geographically
8 appropriate for unitization and whether unitization is appropriate to conserve natural resources of a
9 geothermal reservoir, field or like area.

10 46. The unit agreement regulations require that, before BLM approves a unit agreement
11 for a designated unit area, the unit operator must submit and BLM must consider the documents
12 listed in 43 C.F.R. § 3281.6, including but not limited to a plan of development setting forth a
13 proposed diligent exploration and development schedule.

14 47. The regulations define a “plan of development” as the document demonstrating
15 how the unit operator will diligently pursue unit exploration and development to meet initial and
16 subsequent development and public interest obligations.

17 48. The initial plan of development submitted for consideration by a prospective unit
18 operator must state the types of and timeframes for activities the unit operator will conduct in
19 diligent pursuit of unit exploration and development. The regulations require that, at a minimum,
20 the unit agreement must contain an initial plan of development that requires drilling at least one
21 “unit well,” defined as a well designed to produce or utilize geothermal resources in commercial
22 quantities.

23 49. If the initial plan of development in an approved unit agreement only addresses
24 exploratory activities until a unit well is completed, the regulations require that the unit operator
25 must continue to submit and implement subsequent plans of development sufficient to address the
26 drilling of additional wells until a producible well is completed and until geothermal resources are
27 utilized.

28

1 50. The regulations mandate that, in reviewing, approving, and administering a unit
2 agreement, BLM must ensure that the “public interest” is protected and that the agreement
3 conforms with applicable laws and regulations. The “public interest” is defined as operation of a
4 unit in a way that results in diligent development; efficient exploration, production and utilization
5 of the resource; conservation of natural resources; and prevention of waste.

6 51. BLM manages and oversees operations within a unit through the regulatory concept
7 of “participating area.” The regulations define “participating area” as that combined part of a unit
8 area which is reasonably proven to produce from a horizon or deposit or that supports production
9 in commercial quantities, such as pressure support from injection wells. Unitized leases that are
10 not within a participating area must be eliminated from the unit. Resource production may not
11 commence until the unit operator submits an acceptable participating area and BLM approves it.

12 52. The unit operator must submit an application for a proposed participating area
13 designation no later than 60 days after BLM determines that a unit well is capable of producing or
14 utilizing geothermal resources in commercial quantities or 30 days before production commences,
15 whichever is earlier.

16 53. To support its application for a proposed participating area, the unit operator must
17 submit documentation required by 43 C.F.R. § 3282.5, including but not limited to documentation
18 concerning production and injection wells necessary for unit operations, the area each drains, data
19 from well testing, and interpretations of well performance and reservoir geology and structure to
20 document what lands are reasonably proven to produce geothermal resources in commercial
21 quantities.

22 54. Based upon these submissions, BLM is required to eliminate leases and contract the
23 unit to the area reasonably proven to produce commercial quantities of geothermal resources and
24 establish the effective date for the participating area. To ensure timely compliance with the
25 diligence requirements of the Geothermal Steam Act, the effective date of a participating area
26 must be established as either the first day of the month in which a unit well that caused the
27 participating area to be formed or the start of commercial operations.

28

1 55. Compliance with the requirements to timely designate a participating area and
2 timely eliminate lands from the unit are critical to implementing the goals and mandates of the
3 Geothermal Steam Act. BLM routinely allows individual leases within a unit to satisfy their
4 statutory lease diligence obligations through compliance with the unit diligence requirements.
5 Thus, under BLM's implementation of the Geothermal Steam Act, individual leases can escape all
6 statutory diligence obligations by being committed to a unit unless the unit operator is compelled
7 to timely comply with the unit diligence requirements.

8 56. The regulations provide that, if a unit operator does not meet the minimum unit
9 obligations, BLM will deem the unit agreement void and will retroactively void any lease
10 extensions based upon the existence of the unit.

11 57. In the unit agreement regulations, BLM has specified the contents of a "Model Unit
12 Agreement" to implement the foregoing requirements. 43 C.F.R. § 3286.1

13 58. Section 3.1 of the Model Unit Agreement provides that the unit area of a unit
14 agreement shall be contracted to exclude lands whenever such expansion or contraction is deemed
15 to be necessary or advisable to conform with the purposes of the agreement.

16 59. Section 4.3 of the Model Unit Agreement provides that, on the fifth anniversary of
17 the initial participating area designated shortly after a capable well determination, unitized lands
18 shall either (1) remain in the Unit Agreement "so long as exploratory drilling operations are
19 continued diligently," meaning no more than four months of idle time between drilling exploratory
20 wells; or (2) be eliminated automatically from the Unit Agreement unless the lands are entitled to
21 be part of a participating area. Thus, continued exploratory drilling is required to maintain the unit
22 boundary. Once exploratory drilling ends, the unit must contract down to the participating area
23 required to drain the proven geothermal resources, if any.

24 60. Article XI of the Model Unit Agreement requires that a unit operator continue to
25 submit acceptable exploratory drilling and development plans and engage in a continuous drilling
26 program until the geothermal formation has been tested and the operator has discovered
27 substances that can be produced in commercial quantities sufficient to repay the costs of drilling,
28 completing, and producing operations, with a reasonable profit. The failure of the unit operator to

1 timely drill any of the wells required in plans of development will result in automatic termination
2 of the unit agreement.

3 61. Article XII of the Model Unit Agreement provides that the abandonment of all
4 operations on a participating area will result in automatic termination of the participating area.

5 62. Article XVIII of the Model Unit Agreement provides that the agreement shall
6 terminate on the fifth anniversary of its effective date unless the date of expiration is extended by
7 BLM or “unitized substances” are being produced or utilized in commercial quantities.

8 63. To implement section 1017 of the Geothermal Steam Act and effectuate the
9 participating area/unit contraction provisions identified above, the unit agreement regulations
10 mandate that BLM review a unit agreement not later than five years after approval of the
11 agreement and at least every five years after the initial review to eliminate from inclusion in the
12 unit any lands (leases or portions of leases) that are not reasonably necessary for unit operations.

13 64. Taken all together, the unit agreement regulations (including the Model Unit
14 Agreement) provide a regulatory scheme whereby individual leases may satisfy their statutory
15 diligence obligations through participation in, and timely compliance with, a BLM-approved unit
16 agreement that requires diligent exploration of the unit lands, timely contraction of the unit to
17 eliminate lands not necessary for commercial production, and continuing BLM oversight to ensure
18 protection of the public interest. The designation of the participating area and contraction of a unit
19 must be based on scientific evidence.

20 65. The Glass Mountain Unit Agreement largely incorporates and reflects the
21 provisions of the Model Unit Agreement.

22 **D. Issuance and Abandonment of the Lease and Unit Agreement**

23 66. In May 1982, BLM approved the Unit Agreement, including an attached initial
24 plan of development.

25 67. Since June 1, 1982, BLM has approved several expansions of the Glass Mountain
26 Unit and modifications of the Unit Agreement.

27 68. Plaintiffs are informed and believe, and on that basis allege, that the Glass
28 Mountain geothermal area was not significantly explored or evaluated before May 1982, that

1 lessees did not submit a report with detailed geologic information necessary to show the area was
2 appropriate for unitization, that BLM did not use scientific evidence to determine whether or
3 which part of the area was appropriately unitized, and that BLM subsequently approved the
4 addition of many other leases to the Unit without detailed geologic information about the
5 appropriateness of their inclusion. The absence of information about the Glass Mountain area
6 when the Unit Agreement was approved in 1982 and when other leases were subsequently added
7 to the Unit makes it all the more critical that BLM closely monitor and timely implement the
8 diligence and contraction provisions of the regulations to ensure protection of the public interest.

9 69. Plaintiffs are informed and believe, and on that basis allege, that since at least 2005,
10 if not earlier, Calpine is the sole owner of all remaining geothermal leases in the Glass Mountain
11 Unit and is the sole operator of the Unit. The fact that all leases within the Unit are owned and
12 operated by the same entity means that there is no longer a public interest in having “separately
13 owned leases” united in a unit, as the unit agreement regulations envision and require. BLM has
14 not, however, evaluated this fact in managing the Unit.

15 70. BLM issued the Lease identified as CA12372, which became effective and part of
16 the Unit Agreement on June 1, 1982.

17 71. Plaintiffs are informed and believe, and on that basis allege, that between 1982 and
18 1991, the unit operator(s) conducted limited exploratory drilling, including drilling several
19 temperature gradient holes to locate a geothermal resource and three deep test wells. The unit
20 operator has only relied on one of the three wells, Well No. 31-17 (“Well”), on the Lease, as a
21 well capable of producing geothermal steam in commercial quantities.

22 72. Plaintiffs are informed and believe, and on that basis allege, that the unit operator
23 conducted a single flow test of Well 31-17 for less than two weeks in 1988, the results of which
24 suggested that the Well was capable of producing less than 5 megawatts of electricity from
25 geothermal fluids. Plaintiffs are further informed and believe, and on that basis allege, that the
26 Well was sealed or “shut in” after the 1988 flow testing and has not been operated since that time.

27 73. Based solely on the unit operator’s representations and without explanation or
28 analysis, BLM deemed the Well capable of producing geothermal steam in commercial quantities

1 on February 13, 1989. Defendants have refused for roughly two decades to provide any
2 supporting data or analysis for this determination to Plaintiffs, despite repeated formal and
3 informal requests for such information. Plaintiffs are informed and believe, and on that basis
4 allege, that BLM has made no attempt to verify the continuing commercial capability of the Well
5 since its capable well determination in 1989. For instance, BLM has made no determination that
6 the Well, the Lease, or the Unit can presently provide a reasonable return after the operator meets
7 all costs of drilling and production.

8 74. Plaintiffs are informed and believe, and on that basis allege, that no annual report
9 of diligent exploratory efforts for the Lease has been submitted since 1995.

10 75. Plaintiffs are informed and believe, and on that basis allege, that no drilling has
11 occurred on the Lease since completion and testing of the Well in 1988.

12 76. Plaintiffs are informed and believe, and on that basis allege, that no other
13 exploratory activity has occurred on the Lease since completion and testing of the Well in 1988.

14 77. Plaintiffs are informed and believe, and on that basis allege, that neither Calpine
15 nor any former holder of the Lease has performed any activity to bring the Well into production.

16 78. Plaintiffs are informed and believe, and on that basis allege, that the Well, which
17 was sealed in 1988, is no longer capable of producing geothermal resources in commercial
18 quantities and that the Lease, therefore, no longer contains a well capable of supporting
19 continuation of the Lease.

20 79. The Unit Agreement mandates that the unit operator “continue diligent
21 exploration” in the Glass Mountain Unit until discovery of a commercially viable geothermal pool
22 and thereafter to either continue to “timely drill” wells as provided in its plans of operation or to
23 submit acceptable subsequent plans of operations “[u]ntil there is actual production” of geothermal
24 steam.

25 80. The Unit Agreement provides that a failure to remedy a default in these
26 requirements within a reasonable time “shall . . . result in automatic termination” of the Unit
27 Agreement.

28

1 81. Plaintiffs are informed and believe, and on that basis allege, that no annual report
2 of diligent exploratory efforts for the Unit has been submitted since 1995.

3 82. By letter dated July 24, 1995, BLM informed the unit operator that it was in default
4 of satisfying the unit diligence requirements under the Unit Agreement because the unit operator
5 had not drilled even a single well promised over a series of prior plans of operation. BLM
6 explained that ensuring reasonable unit diligence fell within BLM's public interest mandate and
7 that the Glass Mountain unit was not in the public interest. BLM notified the unit operator that, in
8 the absence of timely drilling, BLM would either (1) terminate the unit for failure to meet the
9 diligence requirement or (2) eliminate all leases from the unit, other than the Lease and the
10 neighboring lease CACA 12371, as not necessary for unit operations.

11 83. Plaintiffs are informed and believe, and on that basis allege, that the unit operator
12 did not drill any new wells in response to BLM's July 24, 1995 letter and has not drilled any well
13 in the Glass Mountain Unit since 1991.

14 84. Plaintiffs are informed and believe, and on that basis allege, that there is no
15 currently approved and valid plan of operation or plan of development in place that requires
16 drilling or other exploratory activity on the Glass Mountain Unit.

17 85. Plaintiffs are informed and believe, and on that basis alleged, that there has never
18 been actual production or commercial utilization of geothermal resources within the Glass
19 Mountain Unit.

20 86. Based on the foregoing circumstances, the Unit Agreement should have
21 automatically terminated.

22 87. The Unit Agreement also requires the unit operator to establish a participating area
23 upon BLM's determination that a well capable of producing geothermal resources in commercial
24 quantities has been completed. Although BLM made such a capable well determination in 1989,
25 the unit operator did not submit an acceptable participating area within 60 days of that
26 determination and, in fact, has never submitted a participating area acceptable to BLM.

27 88. By letter dated June 2, 1996, BLM informed the unit operator that, given the failure
28 to drill as required by a series of approved drilling and exploration plans over several years, the

1 unit should have automatically contracted by February 19994 to the those lands drained by Well
2 31-17; BLM made this determination in reliance on the Geothermal Steam Act, implementing
3 regulations, and Unit Agreement Article 4.3. BLM gave the unit operator 60 days to submit a
4 participating area limited to only those lands drained by the Well.

5 89. Plaintiffs are informed and believe, and on that basis allege, that in August 1996,
6 the unit operator proposed a participating area that encompassed roughly the entire 30,000-acre
7 unit, as opposed to the roughly 2,560-acre area covered by the Lease containing the Well, and
8 BLM never approved that proposal.

9 90. Plaintiffs are informed and believe, and on that basis allege, that currently there is
10 no valid participating area for the Unit.

11 91. Although lands excluded from the participating area “shall be eliminated
12 automatically” from the Unit, Plaintiffs are informed and believe, and on that basis allege, that
13 BLM has not eliminated unnecessary lands from the Unit on such basis.

14 92. Plaintiffs are informed and believe, and on that basis allege, that despite BLM’s
15 mandatory duty under section 1017 of the Geothermal Steam Act to review unit boundaries every
16 five years and eliminate lands that are not reasonably necessary to operation of the unit, BLM has
17 never lawfully completed these tasks.

18 93. As a result of Calpine’s failure to comply with the diligence requirements of the
19 Lease, the Unit, and the Geothermal Steam Act, and Federal Defendants’ failure to either ensure
20 compliance with these diligence requirements and terminate the Lease and Unit, the leasehold and
21 Unit have been dormant, with no exploratory activity, for more than two decades, yet BLM has
22 allowed Calpine to continue holding the Lease and the Unit as valid legal rights.

23 94. The current Glass Mountain Unit unites the Lease with at least 32 other, non-
24 producing leases on which no wells deemed capable of producing geothermal resources in
25 commercial quantities have ever been drilled.

26 95. Twenty-six of those other leases were declared invalid in Pit River Tribe v. Bureau
27 of Land Management, No. 2:04-CV-00956-JAM-AC (E.D. Cal. 2016). That case has been
28 appealed.

Second Cause of Action

(Ongoing Violation of the Geothermal Steam Act for Failure to Terminate or Contract the Glass Mountain Unit Agreement)

102. Plaintiffs hereby reallege and incorporate by reference the allegations of paragraphs 1 through 97 herein as if set forth in full.

103. Federal Defendants have violated, and continue to violate, their mandatory duty under the Geothermal Steam Act, 30 U.S.C. § 1017 and its implementing regulations, as implemented through the Unit Agreement, by allowing the Glass Mountain Unit and Unit Agreement to continue even after:

- a. finding the leaseholder in default under the Unit Agreement for failing to timely drill wells required by approved plans of operation, exploration, or development;
- b. rejecting as unacceptable the unit operator's proposed participating areas and failing to make any alternative participating area designation, such that no participating area for the Unit has existed for more than 30 years after Well 31-17 was deemed capable of production; and
- c. determining that the unit was no longer in the public interest.

104. Federal Defendants' failure to comply with their mandatory duty under the Geothermal Steam Act and its implementing regulations constitutes an agency action unlawfully withheld or unreasonably delayed under the Administrative Procedure Act, 5 U.S.C. § 706(1) and/or action that is arbitrary, capricious, an abuse of discretion, unsupported by substantial evidence, or otherwise not in accordance with law under 5 U.S.C. § 706(2), and is subject to judicial review thereunder.

Third Cause of Action

(Violation of the Geothermal Steam Act for Failure to Review and Eliminate Land from the Glass Mountain Unit Agreement)

105. Plaintiffs hereby reallege and incorporate by reference the allegations of paragraphs 1 through 97 herein as if set forth in full.

106. Federal Defendants have violated, and continue to violate, their mandatory statutory duty under section 1017 of the Geothermal Steam Act and its implementing regulations,

1 separate and distinct from the terms of the Glass Mountain Unit Agreement, by failing to timely
 2 review the Unit Agreement, by failing to ensure that the Unit is capable of providing a reasonable
 3 rate of return after drilling and production costs, by failing to evaluate whether the Unit remains in
 4 the public interest given that a single lessee holds all leases within the Unit and has not completed
 5 any exploration activities for at least 25 years, and by failing to eliminate lands not reasonably
 6 necessary for unit operations. This violation is ongoing and continues to this day.

7 107. To the extent that Federal Defendants have renumbered, renamed, or reconfigured
 8 any leases within the Glass Mountain Unit during the last 25 years, such action was not supported
 9 by scientific evidence developed as a result of diligent efforts by the lessee and, as such,
 10 constituted arbitrary, capricious, and unlawful conduct.

11 108. Federal Defendants' failure to comply with their mandatory duty under the
 12 Geothermal Steam Act and its implementing regulations constitutes an agency action unlawfully
 13 withheld or unreasonably delayed under the Administrative Procedure Act, 5 U.S.C. § 706(1)
 14 and/or action that is arbitrary, capricious, an abuse of discretion, unsupported by substantial
 15 evidence, or otherwise not in accordance with law under 5 U.S.C. § 706(2), and is subject to
 16 judicial review thereunder.

17 **PRAYER FOR RELIEF**

18 WHEREFORE, Plaintiffs respectfully request that the Court:

19 1. Declare that Calpine is not in compliance with the requirements of the Geothermal
 20 Steam Act, its implementing regulations, the Lease, and the Unit Agreement and that such
 21 violations continue to this day;

22 2. Declare that Federal Defendants BLM and Department of the Interior violated the
 23 Geothermal Steam Act, its implementing regulations, and the Lease by failing to timely terminate
 24 the Lease and that such violation continues to this day;

25 3. Declare that Federal Defendants BLM and Department of the Interior violated the
 26 Geothermal Steam Act and its implementing regulations by allowing the Unit Agreement to
 27 continue after finding the operator in default and the Unit no longer in the public interest and that
 28 such violation continues to this day;

1 4. Declare that Federal Defendants BLM and Department of the Interior violated the
2 Geothermal Steam Act and its implementing regulations by failing to timely review and properly
3 revise the Glass Mountain Unit and that such violation continues to this day;

4 5. Order Federal Defendants to terminate the Lease and Unit Agreement;

5 6. Enjoin all Defendants, including Calpine, from undertaking any further activity in
6 reliance on the Lease or Unit Agreement;

7 7. Award Plaintiffs their reasonable attorneys' fees, costs, expenses, and
8 disbursements associated with this action; and

9 8. Grant Plaintiffs such additional relief as the Court may deem just and proper.

10 Date: April 15, 2019

ENVIRONMENTAL LAW CLINIC
Mills Legal Clinic at Stanford Law School

12 /s/ Deborah A. Sivas

13 Attorneys for Plaintiffs Pit River Tribe, Native
14 Coalition for Medicine Lake Highlands Defense,
15 Mount Shasta Bioregional Ecology Center, and
16 Medicine Lake Citizens for Quality Environment